AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-12 (cancelled)

13. (new)
A method for *in vivo* tests in animals by the detection of agents showing specific inhibition or stimulation of clonal growth by selection and testing of drugs, potential drugs, food, food additives, toxins, potential toxins, components from physiological or pathological processes, including microbes and the effect of physical stimulation (e.g. radioactivity or ultrasound) on the body or parts of the body with specific anti-clone or clone stimulating effects comprising:
a) a clonal test for studying the influence of these agents on cloning;
b) a test detecting the degree of neutralization of inhibiting effect of local collocation of cells for studying for example how increase of local cell concentration can reduce or in other ways change the effect of the mentioned substances or physical effects on the process of cloning and on the toxicity and;
c) tests for influencing the development of metastases in other ways than through cloning, for instance by the influence of the mentioned substances or principles on export or liberation of metastasising cells from a malignant tumour or localization where tumour cells are located.

14. (new)

A method for *in vitro* tests in animals by the detection of agents showing specific inhibition or stimulation of clonal growth by selection and testing of drugs, potential drugs, food, food additives, toxins, potential toxins, components from physiological or pathological processes, including microbes and the effect of physical stimulation (e.g. radioactivity or ultrasound) on the body or parts of the body with specific anti-clone or clone stimulating effects comprising:

a test for studying the influence of these agents on cloning;

a test detecting the inhibiting effect of local collocation of cells for studying for example how increase of local cell concentration or collocation can reduce or in other ways change the effect of the mentioned substances or physical effects on the process of cloning and on the toxicity and;

tests for influencing the development of metastases in other ways than through cloning, for instance in tissue cultures by the influence of the mentioned substances or principles on liberated single cells, that were analogous to metastasising cells, outside a localization containing collocated cells of the same kind.

15. (new)

The method according to claim 13 wherein said cloning test comprises:

seeding of cells in agar with or without special growth factor(s):

preparing or incubation of special gels;

incubating in suitable temperature and atmosphere and;

follow up of cells and development of clones.

16. (new)
The method according to claim 13 wherein the method is being performed by using clonal test in fluid medium, for instance in plates with wells.

17. (new)
The method according to claim 13 wherein the mentioned cells comprise: malignant cells, normal cells, cell lines, transformed cells and cells from the tumour or malignant disease of the patient, or cells from the immune system that are clone selected after immunization where the latter can be detected and quantified.

18. (new)
The method according to claim 13 wherein the mentioned cells being a cell line, BHK21/c13 or BHK21/C13 cells transformed with polyoma virus.

19. (new)
The method according to claim 13 wherein the mentioned growth factor(s) comprises insulin, serum, insulin like growth factors, cytokines, or serum extenders and conditioned medium or a combination of these.

20. (new)
The method according to claim 13 wherein the mentioned test for neutralizing the effect by cells in locally high density comprises:
a) transplantation of tumour cell(s) to an animal, for instance Ehrlich ascites cells transplanted to mice or seeding experimental cell cultures with cells in claim 5;
b) adding to the test said substances mentioned, or giving them to the test animal;

c) follow up the tumour cells in the animal or the cells in experimental cell cultures.

21. (new)
The method according to claim 13 wherein the said tests for influencing the development of metastases comprise:
a) injection of tumour cell(s) in the animals for testing the ability to develop metastases ascites or local tumours;
b) applying the agent(s) and;
c) follow up the ability that the substance(s) has (have) to affect the liberation of cells, migration, and the ability to form local tumour.

22. (new)
The method according to claim 21 wherein the said tumour cells being transplanted Ehrlich carcinoma cells.

23. (new)
The method according to claim 13 wherein said method detects compounds causing increased number of clones and/or facilitates the growth and migration of metastases and/or growth of primary tumours.

24. (new)
A method for the treatment or prophylactic of clonal growth in cancer including development of clones resistant to treatment, carcinogenesis from clonal growth of single cells without or following irradiation or other physical effects, development of arteriosclerosis, autoimmunity, rejection of transplants or or prophylaxis of carcinogenetic and atherosclerotic processes and cloning in the immune system, and also inhibiting viral growth in cells not densely collocated, comprising administering to a subject in need thereof an effective amount

of a clonal mitotic inhibitor detected by the method according to claim 13.

25. (new)

The method according to claim 24 wherein the clonal mitotic inhibitors are selected from the group consisting of 4-OH-OPB, Kolchicin, Ibuprofen, Naproxen, Acetyl salicylic acid, p-hydroxy-azobenzene, 2-Butyl-2-hydroxy-N-(4-hydroxy-phenyl)-N'-phenyl malonamide, 1,2-diphenyl-4-hydroxy-4-[2-(phenylsulfinyl)ethyl]-3,5-pyrazolidinedione, and analogues thereof.

26. (new)

A method for the treatment or prophylaxis of pathological conditions associated with decreased clonal activity or clonal growth or to increase clonal growth, comprising administering to a subject in need thereof an effective amount of a clonal mitotic inhibitor detected by the method according to claim 13.

27. (new)

The method according to claim 26 wherein the clonal mitotic stimulators comprise insulin, insulin like growth factors, conditioned medium, serum factors, serum extenders, Diclofenak, Sulindak or Benzo(a)pyrene and analogues of thereof.